PCT/SE02/02448

## AMENDED CLAIMS

10

- Flanged member, intended to be included as a first component in a flanged joint, for installation in a pressure equipment device, and having a first flanged end with a first end surface intended to be assembled together with another end surface of a flanged end on another, second flanged member constituting a second component in said flanged joint, characterized in that said first end surface, in unstressed condition, is slightly concave in the radial direction over at least a part of the extension thereof in the radial direction.
- 2. Flanged member according to claim 1, **characterized** in that said first end surface is concave over the entire extension thereof in the radial direction.
- 3. Flanged member according to claim 1, **characterized** in that said first end surface is concave in the radial direction over at least an area that is foreseen to be the area that essentially will be subjected to deforming forces when the flanged member is assembled together with another flanged member as well as during use.
- 4. Flanged member according to claim 1, **characterized** in that said first end surface is concave in the radial direction over essentially that area which, during use, is foreseen to constitute contact surface against the corresponding end surface of said second flanged member.
- 5. Flanged member according to claim 1, **characterized** in that said first end surface comprises more than one concave part surface in the radial direction and that said part surfaces may have different radii of curvature.
- 6. Flanged member according to any one of the preceding claims,
  characterized in that it has an internal, through, axial opening and that said first
  end surface has an innermost abutment point against the corresponding end surface of said second flanged member, which abutment point is situated farthest in
  in the radial direction, at said opening, as well as that the concavity of the first end
  surface extends all the way in to said abutment point.

AMENDED SHEET

PCT/SE02/02448

2

- Flanged member according to any one of claims 1–5, characterized in that said first end surface has an innermost abutment point against the corresponding end surface of said second flanged member, which has an internal,
   through, axial opening, and that said innermost abutment point is situated farthest in in the radial direction, at said opening, as well as that the concavity of the first end surface extends all the way in to said abutment point.
- 8. Flanged member according to any one of claims 1–7, characterized in that a conceived straight line X that connects the innermost point a of said first end surface, in the radial direction, with the outermost point b thereof, in the radial direction, has a length Lx and that the concavity of the end surface has a maximum depth Dk in relation to a conceived plane surface produced by said line X, which depth Dk is of the order of 0,01 %–2 % of Lx.

15

- 9. Flanged member according to any one of the preceding claims, characterized in that said first end surface is inclined in the radial direction outwards and away from a conceived opposite end surface.
- 20 10. Flanged member according to any one of the preceding claims, characterized in that at least a part of a transition area, between the surface of the flange directed away from said end surface and a part of the flanged member that is substantially parallel to the longitudinal axis of the member, is shaped as a substantially elliptical area.

25 ·

- 11. Joint, comprising two joint halves in the form of two flanged members and included in a pressure equipment device, which members have at least one flanged end each having an end surface, and which members are assembled together via their end surfaces of said flanged ends, which surfaces are facing each other, characterized in that at least one of said flanged members is designed in accordance with any one of claims 1–10.
  - 12. Joint according to claim 11, **characterized** in that both of the flanged members are designed in accordance with any one of claims 1–10.

PCT/SE02/02448

3

Joint according to any one of claims 11–12, characterized in that said end surfaces facing each other are inclined in the radial direction outwards so that they, in radial cross-section, form an angle to each other, when they have been brought together but before assembly, which is such that the distance between the two end surfaces increases in the radial direction outwards, and at least one of said inclined end surfaces being slightly concave.